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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT:

EFED's Section 3 Registration Review for Fipronil Use in Potting Soil for Fire

Ant Control and Other Insect Pests

BARCODE:

D253226 D254052 9W

FROM:

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TO:

Ann Sibold, PM Team Reviewer

Registration Division

The Environmental Fate and Effects Division (EFED) has completed its review of potential ecological risks associated with a FIFRA Section 3 registration of fipronil as a treatment for potting soil media to control fire ants, black vine weevils, Japanese beetle grubs and other insect pests. It is EFED's understanding that the treated potting soil media is used for containerized plants in nurseries, with plantings to include trees, shrubs, plants, flowers, conifers, Christmas trees, and non-food bearing plants (fruit trees, fruit bushes, and nut trees).

EFED currently has no peer-reviewed methods for estimating environmental concentrations in surface water or wildlife food items as a result of pesticide treatment of potting soil media used by nurseries for containerized plants. However, EFED believes that, in general, any exposures to surface water and wildlife from the use of these containerized plants in landscaping will be diffuse and not likely to be toxicologically significant. Therefore, under most circumstances, EFED has no concerns for this use of fipronil with respect to risks to aquatic or terrestrial organisms.

EFED is concerned that containerized aquatic plant potting media may be treated, and use of such plants may result in localized introduction of fipronil to aquatic systems. EFED recommends that the label be modified to exclude the use of treated fipronil potting media for containerized wetland or submerged aquatic plant stock.

EFED is also concerned that potting soil media could be treated in bulk and stored under conditions that could result in run-off to surface water bodies. Used nursery potting media may also pose concerns (unquantifiable risks) for terrestrial and aquatic organism exposures if disposed as a land treatment. Label language should be crafted that would specify storage conditions of treated potting media that would prevent exposure to precipitation and subsequent run-off to surface waters. The label should be modified to specify disposal methods for used nursery potting media that would prevent release to terrestrial or aquatic environments.

For complete environmental fate and ecological effects discussions of fipronil, the reader should refer to the EFED Section 3 reviews for fipronil in-furrow use on corn, fipronil seed treatment on rice, and fipronil soil treatment for rice.